

Db 75 RGDLGAFSRGOMQKPFEDASFALRTGEMSGPVFTDSGIHILRTE 119

RESULT 10
ADI28804
ID ADI28804 standard; protein; 123 AA.

XX
AC ADI28804;
XX
DT 22-APR-2004 (first entry)

DE PIN1 peptidyl-prolyl isomerase domain K77Q/K82Q mutant.
XX
KW Human; PIN1; peptidyl-prolyl isomerase; enzyme; gene; mutant; mutein.

XX
OS Homo sapiens.
OS Synthetic.

XX
FH Key Location/Qualifiers
FT Misc-difference 5 /note= "Encoded by GC"

FT Misc-difference 37
FT Misc-difference 42 /note= "Wild-type Lys substituted by Gln"

FT /note= "Wild-type Lys substituted by Gln"
XX
PN WO2004005315-A2.

XX
PD 15-JAN-2004.
XX
PF 27-JUN-2003; 2003WO-IB003101.

PR 09-JUL-2002; 2002US-0394889P.
XX
PA (PFIZ) PFIZER INC.

XX
PI Matthews DA, Dagostino EF, Ferre RA, Gaur S, Guo C, Hou X;
PI Margosiak S, Mroczkowski B, Nakayama GR, Parge HE, Zhu JX;

XX
DR WPI; 2004-099367/10.
DR N-PSDB; ADI28803.

PT Novel polypeptide containing PIN1 peptidyl-prolyl isomerase domain useful
PT for drug discovery and for designing for the identification and design of
PT modulators of PIN1 peptidyl-prolyl isomerase activity.

XX
PS Claim 7; SEQ ID NO 4; 63pp; English.

XX
CC The present sequence is the coding sequence of a mutated peptidyl-prolyl
CC isomerase (PPIase) domain of human PIN1, corresponding to amino acids 45-
CC 163 of full-length PIN1. The mutations result in substitution of Gln
CC residues for the native Lys-77 and Lys-82 amino acid residues of the
CC PPIase domain. Lys-77 and Lys-82 comprise the active site of the PPIase
CC domain. PIN1 is a phosphorylation-dependent PPIase and a regulator of
CC Cdc25. The invention relates to mutant PIN1 polypeptides containing the
CC PPIase domain but not containing the PIN1 WW domain, and to the
CC polynucleotides that encode them. It also relates to the X-ray crystal
CC structures of these polypeptides and to the X-ray crystal structures of
CC the mutant PIN1 PPIase polypeptides and small entities that bind to the
CC PIN1 PPIase substrate-binding domain. The structure coordinate data
CC derived from these crystals provides a three-dimensional description of
CC the substrate-binding site of PIN1 PPIase useful in drug discovery and
CC design for the identification and design of modulators of PIN1 PPIase
CC activity.

XX
SQ Sequence 123 AA;

Query Match 98.5%; Score 526; DB 8; Length 123;
Best Local Similarity 98.1%; Pred. No. 1.5e-51;
Matches 103; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

1 HLLVKHSQRRPSSWRQEKITRTKEALELINGYIQIKSGEEDFESLASQFSDCSSAKA 60

Db 19 HLLVKHSQRRPSSWRQEKITRTQEEALELINGYIQIKSGEEDFESLASQFSDCSSAKA 78

QY 61 RGDLGAFSRGOMQKPFEDASFALRTGEMSGPVFTDSGIHILRTE 105
Db 79 RGDLGAFSRGOMQKPFEDASFALRTGEMSGPVFTDSGIHILRTE 123

RESULT 11
ABG12572
ID ABG12572 standard; protein; 191 AA.

XX
AC ABG12572;
XX
DT 18-FEB-2002 (first entry)

XX
DE Novel human diagnostic protein #12563.

XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder.

XX
OS Homo sapiens.
XX
PN WO200175067-A2.

XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.

XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.

XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;

XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS76759.

PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.

XX
PS Claim 20; SEQ ID NO 42931; 103pp; English.

XX
CC The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological actions in
CC polypeptide and polynucleotide sequences have application in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX
SQ Sequence 191 AA;

Query Match 84.8%; Score 453; DB 4; Length 191;
Best Local Similarity 89.4%; Pred. NO. 5.2e-43;
Matches 93; Conservative 2; Mismatches 7; Indels 2; Gaps 2;

Exhibit E

QY 1 HLLVKHSQSRPPSSWRQEKITRTKEALELINGYIQIKSGEEDFESLASQFSDCSSAKA 60
Db 69 HLLVKHSQSRPPSSWRQEKITRTKEALELINGYIQIKSGEEDFESLASQFSDCSSAKA 128
QY 61 RGDLGAFSRGQMOKPF-EDASFALRT-GEMSGPVFTDGIHIL 102
Db 129 RGDLGFSRGMOKPFKXRTPRFALRTGGDERGFCFTDGIHIL 172

RESULT 12

AA48377
ID AAY48377 standard; protein; 163 AA.
XX
AC AAY48377;
XX

DT 08-DEC-1999 (first entry)
XX

DE Human prostate cancer-associated protein 74.
XX

KW Expressed sequence tag; EST; prostate; tumor; treatment; gene therapy;
KW cancer; tissue specificity; human.
XX

OS Homo sapiens.
XX

PN DE19811194-A1.
XX

PD 16-SEP-1999.
XX

PF 10-MAR-1998; 98DE-01011194.
XX

PR 10-MAR-1998; 98DE-01011194.
XX

PA (META-) METAGEN GES GENOMFORSCHUNG MBH.
XX

PI Specht T, Hinzmann B, Schmitt A, Pilarsky C, Dahl E, Rosenthal A;
XX WPI; 1999-519629/44.
DR N-PSDB; AAZ33510.
XX

PT New nucleic acid expressed at high level in normal prostatic tissue and
PT encoded polypeptides, used to treat cancer and screen for therapeutic
agents.
XX

PS Claim 25; 152; 194pp; German.
XX

CC This invention describes novel nucleic acid sequences (A) that are
CC expressed at high level in normal prostatic tissue. Polypeptides (I)
CC encoded by (A) are used: (a) for identifying agents for treatment of
CC prostatic cancer and (b) for therapy of prostate cancer, optionally where
CC expressed by gene therapy methods. (A) is also used to isolate full-
CC length genes (for gene therapy) and for recombinant production of (I),
CC which can be used to raise specific antibodies. (A) are identified by
CC assembly of ESTs (expressed sequence tags) before these are analyzed for
CC expression pattern (tissue specificity). This approach eliminates many of
CC the false results, as regards tissue specificity, associated with known
CC methods that use single (usually short) ESTs. AAY48304-Y48456 represent
CC peptides encoded by the expressed sequence tags described in the method
XX of the invention
SQ Sequence 163 AA;

Query Match 77.9%; Score 416; DB 2; Length 163;
Best Local Similarity 95.3%; Pred. No. 6.9e-39;
Matches 82; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 HLLVKHSQSRPPSSWRQEKITRTKEALELINGYIQIKSGEEDFESLASQFSDCSSAKA 60
Db 59 HLLVKHSQSRPPSSWRQEKITRTKEALELINGYIQIKSGEEDFESLASQFSDCSSAKA 118
QY 61 RGDLGAFSRGQMOKPFEDASFALRTG 86
Db 119 RGDLGAFSRGQMOKPFEDASFCAADG 144

RESULT 13

ADP29953

ID ADP29953 standard; protein; 141 AA.
XX

AC ADP29953;
XX

DT 12-AUG-2004 (first entry)
XX

DE Human secreted protein SEQ ID #720.
XX

KW Cytostatic; Antiinflammatory; Immunosuppressive; Antibacterial; Virucide;
KW cancer; inflammatory; immune; human secreted protein.
XX

OS Homo sapiens.
XX

PN WO2004035732-A2.
XX

PD 29-APR-2004.
XX

PF 28-AUG-2003; 2003WO-US026780.
XX

PR 29-AUG-2002; 2002US-0406576P.
PR

PR 29-AUG-2002; 2002US-0406579P.
PR

PR 29-AUG-2002; 2002US-0406585P.
PR

PR 29-AUG-2002; 2002US-0406588P.
PR

PR 29-AUG-2002; 2002US-0406608P.
PR

PR 29-AUG-2002; 2002US-0406611P.
PR

PR 29-AUG-2002; 2002US-0406612P.
PR

PR 29-AUG-2002; 2002US-0406616P.
PR

PR 29-AUG-2002; 2002US-0406640P.
PR

PR 29-AUG-2002; 2002US-0406642P.
PR

PR 29-AUG-2002; 2002US-0406646P.
PR

PR 29-AUG-2002; 2002US-0406653P.
PR

PR 29-AUG-2002; 2002US-0406655P.
PR

PR 29-AUG-2002; 2002US-0406666P.
PR

PR 17-SEP-2002; 2002US-0410946P.
PR

PR 17-SEP-2002; 2002US-0410947P.
PR

PR 17-SEP-2002; 2002US-0410948P.
PR

PR 17-SEP-2002; 2002US-0410949P.
PR

PR 17-SEP-2002; 2002US-0410953P.
PR

PR 17-SEP-2002; 2002US-0410957P.
PR

PR 17-SEP-2002; 2002US-0410958P.
PR

PR 17-SEP-2002; 2002US-0410959P.
PR

PR 17-SEP-2002; 2002US-0410960P.
PR

PR 17-SEP-2002; 2002US-0410961P.
PR

PR 17-SEP-2002; 2002US-0410962P.
PR

PR 17-SEP-2002; 2002US-0411019P.
PR

PR 17-SEP-2002; 2002US-0411022P.
PR

PR 17-SEP-2002; 2002US-0411023P.
PR

PR 17-SEP-2002; 2002US-0411024P.
PR

PR 17-SEP-2002; 2002US-0411032P.
PR

PR 17-SEP-2002; 2002US-0411035P.
PR

PR 17-SEP-2002; 2002US-0411037P.
PR

PR 17-SEP-2002; 2002US-0411041P.
PR

PR 17-SEP-2002; 2002US-0411045P.
PR

PR 17-SEP-2002; 2002US-0411046P.
PR

PR 17-SEP-2002; 2002US-0411048P.
PR

PR 17-SEP-2002; 2002US-0411052P.
PR

PR 17-SEP-2002; 2002US-0411055P.
PR

PR 17-SEP-2002; 2002US-0411073P.
PR

PR 17-SEP-2002; 2002US-0411082P.
PR

PR 17-SEP-2002; 2002US-0411101P.
PR

PR 17-SEP-2002; 2002US-0411111P.
PR

PR 18-APR-2003; 2003US-0463700P.
PR

PR 18-APR-2003; 2003US-0463708P.
PR

PR 18-APR-2003; 2003US-0463716P.
PR

PR 18-APR-2003; 2003US-0463732P.
PR

PR 02-MAY-2003; 2003US-0467199P.
PR

PR 02-MAY-2003; 2003US-0467201P.
PR

PR 02-MAY-2003; 2003US-0467203P.
PR

PR 02-MAY-2003; 2003US-0467230P.
PR